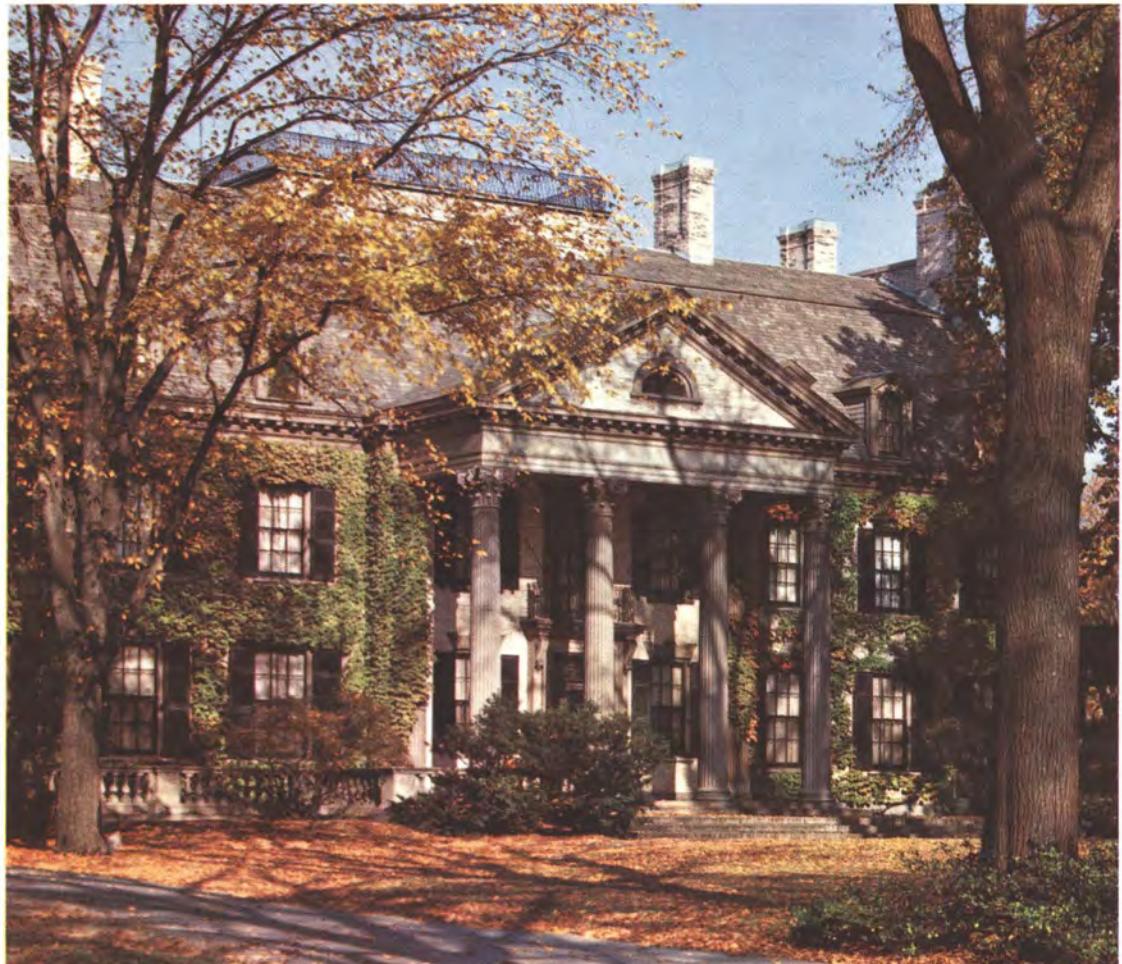


IMAGE

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JOURNAL OF PHOTOGRAPHY AND MOTION PICTURES
OF THE GEORGE EASTMAN HOUSE



OSCAR N. SOLBERT

He had an unquenchable enthusiasm . . .
by Edward P. Curtis

THE POSSE IS STILL RIDIN' LIKE MAD

Part II of *Notes on an Early Phase of Western Films*
by George Pratt

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THE PRESENT ERA

Over a hundred years ago Sir Frederick Pollock, president of the society now known as the Royal Photographic Society, stated in the Photographic Journal of 1855:

"We can not conceive a more perfect history of everything that belongs to man than Photography is able to record; and not merely of what belongs to man himself, but of everything that can occupy his attention; in short, everything that can be the subject of visual observation is rendered permanent, so that whatever is noticed now may be noticed by all the world for ever.

"This is what probably, ages hence, may render the present era one of the most important that ever presented itself to the attention of mankind in the history of science."

Sir Frederick's prophecy became true much sooner than he had anticipated. Already the camera was taken for granted and antiquarians began to peer into its past, and to compile histories. In 1864 the first American history of photography was written by Marcus Aurelius Root in his *The Camera and the Pencil*. In 1867 Victor Fouque probed into the very beginnings of photography in his biography of Nicéphore Niépce, which he called *The Truth Concerning the Invention of Photography*. Each decade since has seen the publication of a history, by Gaston Tissandier, W. Jerome Harrison, J. M. Eder, Georges Potonié, Robert Taft, Erich Stenger, Helmut & Alison Gernsheim, and the present writer.

What we have all forgotten is that history begins with the present, that every era "is one of the most important that has ever presented itself to the attention of mankind . . ." To document the present so that it will be available to future historians in a precise and objective form is difficult, but it is important. As historians we should place no time limit upon our researches; we should collect what is available from yesterday as well as yesteryear — before it is too late.

EDITORIAL

Beaumont Newhall



Oscar N. Solbert

by Edward P. Curtis

MR. CURTIS is a Trustee of the George Eastman House, a Vice President of the Eastman Kodak Company, and a long standing friend of Oscar Solbert.



1910—Graduation, West Point

TO MANY READERS OF IMAGE and to many of those interested in the work of George Eastman House, Oscar Solbert was known principally as a successful director responsible in large part for important additions to the physical plant of the institution and as the guiding spirit behind many of its activities. The Dryden Theatre, the Strong building, housing the vaults containing the negatives of the world's great motion pictures, and other important additions to the institution, were given by their generous

1928—Trip to Europe, Oscar N. Solbert, Marion Gleason, George Eastman, Mrs. Oscar N. Solbert, George Todd



donors in response to Oscar's eloquent presentation of the contribution these additions would make to the work of Eastman House. The "George Awards" for the outstanding motion picture artists of bygone years did much to publicize the importance of the work in the motion picture field, besides bringing to Rochester the many colorful personalities who were recipients of these trophies. In a company of this sort there was no one whose career was more unusual and striking than that of the Director who conceived the project.

He was born in a little town in the north of Sweden in the year 1885, one of a family of five children whose parents were simple people of modest circumstances. We know very little about his childhood days in Sweden except that they left him with a lifelong interest in the country and everything Swedish. When Oscar was eight years old his family emigrated to the United States and settled in Worcester, Massachusetts. Here, he supplemented the family income by the traditional method of peddling newspapers as well as teaching school at night and working in summer resorts during vacations to help pay for his own schooling. After two years at the Worcester Polytechnic Institute he received an appointment to West Point. History does not record whether he had his heart set on being a soldier at this time, but in

any case he graduated sixth in his class in 1910 and, in accordance with custom, entered the elite Corps of Engineers. Following various tours of duty he returned to the Academy in 1914 as an instructor and had among his pupils Cadet Eisenhower, who evidently profited from Oscar's instruction. It was during his tour of duty at the Academy that he was married to Elizabeth Abernathy. They had first met at Fort Leavenworth, Kansas: Betty recalls as a young girl looking down from the top of the stairs at the dashing young officer in the company of another striking military figure—Douglas MacArthur—when they were both stationed at that post.

When the United States entered World War I, we were almost entirely dependent on our allies for intelligence on what was going on inside Germany. The Scandinavian countries adjacent to her were a potential source of information of great military value and, as a Military Attaché to the neutral countries of Denmark and Norway, Oscar shared with his colleagues the task of setting up a system of contacts within Germany to obtain these vital secrets. Before the war ended they had succeeded in getting a steady flow of information on troop movements and other military intelligence of great importance to our own operations.

For five years after the first war, from 1919 to 1924, he served as Military Attaché in London under such distinguished Ambassadors as John W. Davis, George Harvey and Frank Kellogg. When Chief Justice William Howard Taft visited London during this period to receive honorary degrees from several British Universities, Oscar was detailed as his aide. It was Mr. Taft who later suggested to President Coolidge that Oscar would be eminently qualified to serve as Military Aide in the White House. During these days in London he was instrumental in setting up the very successful student exchange program between the United States and Britain financed by the Commonwealth Fund. The active patron of this on the British side was the then Prince of Wales, beginning an association between them which lasted for many years.

Acting as Military Aide in the White House for something less than a year in 1924-1925 was an interesting assignment in many ways but involved the usual round of ceremonial duties which evidently were not too exciting. During this period in Washington he saw a great deal of his old friend, Colonel Fritz Strong, also an

engineer. In their discussions about their respective military careers, they came to the conclusion that inasmuch as there obviously could never be another important war in the world there was no real future for a man in uniform. A prominent Chicago industrialist, Lawrence Whiting, whom they had met in Washington, had just embarked on the project of the large Furniture Mart and offered them jobs in Chicago so the two engineers resigned from the Army in 1925 to try their hands at industry.

While Oscar was still associated with Whiting, an old friend, Will Hays, who was then head of the Motion Picture Producers Association, borrowed his services to do a temporary job in Europe in connection with some international problems of the motion picture industry. The Eastman Kodak Company, a member of this association, was somewhat involved in this project, and was impressed with the skill with which the former army officer handled the negotiations. At the conclusion of his work for Will Hays, it was suggested that he join Kodak, and Mr. L. B. Jones, then Vice President in charge of sales and advertising, took him on as an assistant. With his unusual contacts all over the world, and his persuasive ability, he undertook a variety of special assignments for both Mr. Jones and Mr. Eastman and was closely associated with the latter throughout Mr. Eastman's life, both in business and as a friend. He was a frequent visitor at the Solberts' home, and they accompanied him on several of his trips to Europe. It was during this period that Mr. Eastman was intensely interested in trying to secure the world-wide acceptance of the 13-month calendar so that, together with Moses Cotsworth—the father of the idea—Oscar travelled extensively in Europe on this project. This seems to have been one of the few occasions on which he failed to accomplish his mission.

When the Kodak International Photographic Contest was organized in 1931, an imposing list of royalty and other prominent personages were persuaded to lend their names as patrons of this event.

With his extensive military background, it was only natural that Oscar should return to the service in World War II. Here, again, he performed unusual services for which his background and international experience fitted him so well. He went early in the war to England, where his friend, Anthony Drexel Biddle, was assigned as Ambassador to the European gov-

ernments in exile in London. It was a peculiarly difficult task to deal with governments which had no one to govern, and whose interests were not always wholly compatible with those of the warring allies, but Oscar's tact and personal knowledge of most of the countries he was dealing with won him the highest commendation from Ambassador Biddle and his charges. In 1943, while still a Colonel, he became Chief of Special Services in the European theatre and was promoted to Brigadier General in recognition of his successful work in organizing and directing entertainment, recreational, and educational programs for the men of that command. At the war's end, he returned to Kodak as a member of the executive staff until his retirement from the company in 1949.

The qualities which had made for Oscar's successful career as an officer and a business executive proved to be equally applicable to his career as Director of George Eastman House. He had an unquenchable enthusiasm for projects which might well have appalled a less determined character, besides an extraordinary ability to instill his enthusiasm in others and to get results. He was naturally friendly and liked people. His friends were world wide and a reflection of his varied interests. Until the day of his death, he continued to be an amazingly young appearing and vigorous individual, completely belieing his seventy three years. No one had a greater zest for living and few were able to enjoy it as he did right up to the end. "This was the Happy Warrior; this was he whom every man at arms would wish to be."



1944—Paris



1949—Opening of Eastman House



1946—On Steeplejack

The Posse Is Still



EVERY WESTERN DEMANDS a big saloon fight. Here Richard Stanton (center) discharges his obligations in a 1915 Ince film *The Golden Trail*. Lurking somewhere is Jean Hersholt as an extra.

Part II of "Notes on an Early Phase of Western Films (1907-1914)." Part I, printed in April, discussed Broncho Billy Anderson, the first great star of Westerns, and noted the reaction that set in against Westerns after so many, cheaply and hastily produced, were thrown onto the market.

Ridin' Like Mad

by George Pratt

THE FRENCH RUSHED TO DEIFY TOM MIX, second of the great Western stars in point of time, and William S. Hart, the third.

In Paris, thousands crowded the many theaters showing Tom Mix films in 1914. They would have been doubly appreciative if they had seen (as many must have) the French imitation Westerns in which the producers' sense of authenticity was so weak that they allowed encountering cowboys to kiss each other on both cheeks.

The Italians were not above trying their hand at Westerns, or inserting a sequence "à la American Wild West" to brighten up a feature. All this without doubt sent the public flocking to the real thing.

Hungary and South Africa clamored for American Westerns. So did England. In disgruntled exodus at a matinee of *The Last Days of Pompeii* in Yorkshire, an elderly patron told the theater manager: "We want less of that stuff and more cowboy pictures."

The Queen of Roumania, who functioned both as a monarch and as a romantic novelist, was so enamored of American "Wild West" features because of their delightful scenery and the intensely human plots" that she sometimes ordered them screened three and four times for her benefit.¹

In Peru, where the conditions of exhibition were at best puzzling, a short Tom Mix film was habitually divided into as many as ten parts, thus enabling "the exhibitors to get along with less reels [throughout the evening], as it takes more time to show the picture in ten parts, and it makes the public believe that they get more for their money . . . Every few minutes the lights are turned on, until the next part has been put into the machine, and since no film, European or American, has been produced for such treatment, it makes the picture appear foolish and disconnected."²

Mix had been a range rider since his early youth, near his birthplace in El Paso, Texas. His birth date, which shyly avoided print, ap-

pears to have been 1880. He became a Texas Ranger and later fought first in the Spanish-American War under Teddy Roosevelt and then in the Boxer Rebellion in China. The same Selig Company which had started Broncho Billy Anderson in Westerns hired Mix in 1910. Billed as a "U. S. Marshall, Expert Roper and Broncho Buster"—all of which he was—he was featured in *Selig's Ranch Life in the Great Southwest*, along with champions at roping and steer bulldogging.

When Selig launched a series of wild animal pictures in 1911, Mix stood beside the camera, rifle in hand, to prevent the zoo from feeding on the actors. During the second of these films, *Back to the Primitive*, he leaped into camera range, and the audience was startled to see a white-helmeted man spring out, kneel, fire on a charging lion and fell him. Mix also picked off a leopard which forgot the script and pounced upon Kathlyn Williams, the leading lady, instead of upon a chicken.

For the next few years, Mix seems to have been in and out of Selig films, sometimes leaving to tour in Wild West shows or to appear at various fairs. But from the summer of 1914 through the year 1916 he must have been continuously at work in front of the Selig cameras.

His early films were short, filmed in Missouri, Colorado, Florida, Arizona, New Mexico. It was the Commercial Club of Las Vegas, New Mexico, which angled for a motion picture company through a series of ads running from February to May, 1915, and snagged Tom Mix. Every week came the siren-call in the advertising columns of *The New York Dramatic Mirror*; "Las Vegas . . . [Will] Make You Famous and Us, Too—Let's Get Together"; "The Sun Is Shining Today in Las Vegas"; "The Camerman's Paradise. Good stuff to shoot—no retakes no static"; "Las Vegas will add years to the life of the director." Then a little chart declared it was idiotic to journey 2,262 miles from Chicago to the West Coast when you could save 1,023 miles by dropping down to Las Vegas. Now the

campaign was getting specific: the Selig home offices were located in Chicago.

Come June, Mix and company arrived in Las Vegas where the town welcomed him with a parade and appointed him deputy sheriff. The Commercial Club had been absolutely honest. Weather conditions were ideal, as promised; during his stay there Mix was able to complete six films in about a month's time, working in the clear air from "sunrise to sunset every day."

Mix's approach to Westerns was not the same as Broncho Billy Anderson's. Quite early (1913) he turned thumbs down on love interest, preferring "sensational dare-devil feats with 'critters and shootin' irons.' The skilled and fearless Mix is famed for everything but sentiment. He declares he is not for mush."³

The truth is that he was a bad actor and he

knew it. But by incessant and ingenious pranks on the screen he could avoid being cornered into positions where acting was required. So he let his horse drag him through a stream at the end of a lariat and invented "little scary moments, such as when he upsets a stagecoach traveling at full speed or drops from a still swifter mount to the ground. He also allows his horse to throw him over his head . . ." Swift, sure, unexpected, he jolted "involuntary exclamations of horror from his audience."⁴

Of course there were miscalculations: chuck wagons could collide and trample him in the tangle; his over-rapid fingers could catch in the saddle. Once, at one and the same time, he was suffering from a broken nose, a broken right arm, a broken index finger and a sprained hip.

Another time he issued an ultimatum that in





MIX WAS A BAD ACTOR where emotions were concerned, but perfectly at home with the action of riding or shooting.

TOM MIX'S BASHFULNESS as exemplified in a later movie dated back to 1913 when he declared he was "not for mush."

"THE FACE OF A THOUSAND EMOTIONS," as the ads said. William S. Hart registers conflict in the role of Sheriff Hale in *The Sheriff's Streak of Yellow* (1915). His problem: accusations of cowardice after he lets a notorious outlaw escape. But the sheriff is repaying his debt to the outlaw's mother who once rescued him in the desert. This film was a two-reeler. Hart made 19 of them.



(Courtesy Academy of Motion Picture Arts & Sciences)

the interest of realism, actual bullets were to be used during filming. He was the first to be reminded of this when "a seething chunk of lead . . . [split] on a rock, one half of the bullet taking a trip through Tom's lower jaw. He pried the piece . . . out . . . using his jackknife."⁵ But the pain of eating drove him from his usual steak diet to beans. Stoically he underwent this for the sake of the effect of that "little cloud of alkali dust kicked up by the bullet" immediately following each gunshot on the screen.

The very earliest Mix was not necessarily the most characteristic one. Instead of always upholding law and order, he occasionally played outlaws and feuding Apaches. And all the Boy Scout troops who later idolized him would have been horrified to see him tear the horn off an unruly steer which charged the camera instead of submitting to bulldogging.

Selig finally let him both write and direct his own films. The revolution in the American film industry which brought about an increase in the length of films to twice the standard footage, producing two-reelers, then to three,

four and five times more, affected both Tom Mix and William S. Hart more profoundly than it had Broncho Billy. A big five-reel historical Western, *In the Days of the Thundering Herd*, in which Mix was starred, was released in November, 1914. He shared billing with Pawnee Bill's buffalo herd, reputedly the largest in existence, and "a carload of tepees was shipped to the scene in order to give a true picture of . . . [an] Indian village of the eighties."⁶ It was one of the first examples of a feature-length Western written directly for the screen. The usual route was by way of plays and novels.

This was an almost isolated opportunity, however, for him to crash the feature market which was creating a new orientation in film making. Later, toward the end of 1916, he was at work on Zane Grey's *The Light of Western Stars*, to be filmed in 10 reels at Newhall, California, but the project collapsed. This is a pity since he seems to have put in several months' labor on it, and in familiar fashion had begun to decorate the action with stunts and improvisations: "In one of his scenes . . . he is noted

cavorting perilously about on the top of a fifty-foot windmill, and finally plunges from this height into a trough of water."⁷

At the beginning of 1917, after six years with Selig, Mix signed with William Fox whose company starred him up into the 1920's when he became the undisputed King of Cowboys. Piqued, Selig issued the five-reel *The Heart of Texas Ryan* after Mix had departed, but demoted his name beneath the listing of other actors in their advertising. Remarked *Photoplay* magazine: "Until Bill Hart came upon the screen, we should have considered this an incomparable type of Western feature."⁸

William Surrey Hart, born in Newburgh, New York (1870), spent most of the first fifteen years of his life in Dakota Territory, among Indians and Indian ways, a point which he later stressed. This was necessary, as he admitted, to

counter the "oft-repeated query—'Did Bill Hart get his knowledge of the West in motion pictures?'"⁹

Those who questioned may have uneasily recalled the florid roles Hart had enacted previously on the stage: Shakespeare, Messala in the original New York cast of *Ben-Hur*, the Bad Man in *The Squaw Man*, and the title role in *The Virginian*.

It is not likely that Hart was an impressive actor on the stage. The critic William Winter, after witnessing the opening night of *Ben-Hur* in New York in 1899, took pen in hand to scourge the entire cast with: "More bad elocution has never, surely, been heard in one performance."¹⁰

It wasn't his voice, of course, that silent movies needed. It was his face. His was the great granitic face for which Westerns had been wait-

IN *The Bargain* (1914) Ince used a "massive" set for the "combination saloon, dance hall and gambling house." Hart played a two-gun bandit in this king-sized early feature-length Western.

(Courtesy Academy of Motion Picture Arts & Sciences)



ing. It transfixed like Uncle Sam pointing head-on from a recruiting poster. It was first recorded by a motion picture camera in May, 1914, at Inceville on the California Coast, and it appeared first on the screen in two two-reelers as the face of the "heavy" which in actor parlance means the villain. Then William S. Hart made Western films which some consider supreme to this day.

Inceville was the enormous domain of the producer Thomas H. Ince, an actor friend from Hart's earlier days but now head of a great film production center. Once a director, but now mainly a supervisor, co-author of most of the scripts, and constant editor of the hundreds of film subjects that passed into circulation from his establishment, Ince was a key figure in the development of the Western.

He was quite convinced that Westerns deserved thought and careful production, and as

early as 1912 accomplished "some splendid work in rescuing this type of play from the inconsistencies and primitive sensationalism of early examples. He has given dignity to a class of production with which the country has been long inundated, whose poorer specimens seemed likely to destroy intelligent patronage of the picture shows."¹¹

At the time when he was beginning to rise in importance as a producer, Westerns had already settled into their long-trodden tracks so conspicuously that a reviewer could write of "a Western along the formal lines." Ince pondered. "All too many producers," he wrote later¹², "were content to call their pictures 'Westerns' just because you could see leather chaps and shooting irons on the actors. They didn't bother themselves with the construction of a story that had what is commonly known as 'the punch'..." And they didn't bother themselves, either, he



(Courtesy Mrs. Thomas H. Ince)

IN AFTER DAYS Thomas H. Ince, Western producer, discovers the old stagecoach which used to roll the range in his Westerns of 1912.

CONCLUSION OF THE SHOOTING SCRIPT for Hart's *In the Sage Brush Country* (1915), a two-reeler written by C. Gardner Sullivan and Ince. There are two endings, neither of which indicates any future together for Edith the mine owner's wife and Jim Brandon the bandit (Hart). But he has twice passed the crisis of wanting to rob her of the payroll, and has kept her unaware of his real character. Ending No. 1 explains that Jim's wife ran off with another man. Ending No. 2—which was filmed and released—leaves Jim's past unexplained. Choice of the endings depended upon a conference with Ince ("See Mr. Ince").

SCENE 129. DISTANCE SHOT OF A FEW MINING BUILDINGS.

Edith is riding toward them and away from the camera -- she is riding very slowly -- show her getting into the fat background --

SCENE 130. CLOSE UP OF JIM AT EDGE OF CLIFF.

He is standing staring off the picture -- his eyes have lost their alert expression and he has forgotten himself for the moment as his mind drifts -- as he stands there, ~~DISOLVE OUT~~
~~INTO THE FOLLOWING~~

some men is lucky, others aint so lucky.

SCENE 131. SMALL LIVING ROOM.

A BACKGROUND DOOR SHOWS -- A young girl, who is supposed to be Jim's wife is nervously placing a note on a foreground table on which is a medicine bottle and a glass and spoon -- she has an old fashioned suitcase in her hand -- a young chap, his hat and overcoat on, is watching her nervously and urging haste -- she is also dressed for the street -- get over the idea of an elopement -- he puts his arm about her, they kiss hastily and steal off -- ~~SECOND STILE SCENE~~ -- then Jim, looking much younger and with a good natured boyish expression, comes on from the background door -- he is supposed to be a little under the weather -- he comes down to the table and pours himself a dose of medicine which he drinks -- he looks about and calls: "Anna" -- he gets no response and calls again -- he is surprised and is about to investigate when his gaze falls on the note -- he picks it up and reads it -- he registers the idea of it being from his wife and telling of her elopement -- with a bitter groan he sinks into a chair at the table and buries his face in his hands -- as he sits there, ~~DISOLVE BACK TO JIM AT THE EDGE OF THE CLIFF~~ -- he stands there in deep, sad thought and then looking into the camera speaks slowly -- ~~INSERT TITLE~~ --

"SOME MEN IS LUCKY. OTHERS AINT SO LUCKY!"

BACK TO ACTION -- Jim speaks the sub-title with resigned conviction as he stands there thinking of what his life might have been, ~~DISOLVE OUT VERY SLOWLY~~ --

SECOND ENDING - SEE MR. INCE

SCENE 130. CLOSE UP ON JIM AT EDGE OF CLIFF

Jim
He is staring off the picture -- his eyes have lost their alert expression and he has forgotten himself for the moment as his mind drifts -- cut --

- 25 -

SCENE 131. CLOSE UP ON EDITH

Edith stops on foreground -- turns in her saddle -- looks back as if she sees Jim -- get over idea she appreciates his kindness to her -- she smiles sweetly, turns again and rides off scene --

SCENE 132. CLOSE UP ON JIM AT EDGE OF CLIFF

He stands there in deep thought looking into the camera -- he speaks slowly -- ~~INSERT TITLE~~ --

"SOME MEN IS LUCKY. OTHERS AINT SO LUCKY!"

BACK TO ACTION -- Jim gets over the idea that he appreciates a good woman when he sees her, and how different his life might have been had he met her sooner -- ~~SLOWLY DISOLVE OUT LEAVING HIM A SILHOUETTE FIGURE AGAINST THE SKY~~ --

added, with "human interest," i.e., situations involving people who seemed real enough to engage audience sympathy. It was to impart human interest and punch that Ince pored over selected scripts at night.

Before 1914 was out, Ince put Hart under contract at \$125 a week to act in and direct his own films. This modest salary, when compared with the fancy figures commanded by other stage stars soon entering films, indicates how low Hart's stage fortunes must have fallen by the time Ince took a chance on him for films. In contrast, the character actor Frank Keenan was drawing \$1000 per in 1915. Mary Boland made two films at a salary of \$450 a week; Lewis Stone made one film at \$800 a week. H. B. Warner was paid \$1000 or more a week for five films. And they were just acting.

In the chronology of Hart's two-reelers, the switch over from "heavy" to hero occurred with his third film, *The Passing of Two-Gun Hicks* (released December, 1914), which he regarded for years as "about the best story I ever have screened."¹³ Study of the synopsis illuminates not only the kind of character Hart used to play but also Hart's own vision of himself, for Hart seems to have seen himself as in actuality the same type of sacrificing, misunderstood person that Hicks was, both proud of and embarrassed at his inherent nobility, and indeed was very pleased when people greeted him on the street as "Two-Gun Hicks."

The following review gives the plot in some detail: "Two-Gun Hicks is . . . a cool, insolent, steely-eyed man . . . who seldom shoots, but when he pulls there is nearly always something doing. He is not first to reach shanty town. He is preceded by Bad Ike on a rampage. Bad Ike is seen coming down the hill, blazing away with both hands and boozing drunk. The inhabitants run to shelter—men in the saloon rush to cover; even the dance hall girls hide. Bad Ike terrorizes the other fourflushers with his guns for a while, then rounds them all up at the bar for a drink. Two-Gun Hicks happens along, and he comes unannounced. The shanty town is deserted when he rides in, but he lights a match with one hand, snipping the end with his nails, glances around with a sneer and walks into the bar. He pounds the table and orders a drink. 'Who the ----- are you?' demands Bad Ike, unwilling to have any other rooster in his barnyard. The stranger walks straight up to the bad man, looking him in the eye, and says, 'I'm

Two-Gun Hicks,' and he proves it by drawing swiftly and shooting Bad Ike in the wrist. This is mere pleasantry, however, as a round of drinks follows, and the two bad men become good friends.

"Two-Gun Hicks spurns the advances of the dance-girls. 'When I want a woman, I take her,' he affirms, 'but I don't care to have 'em hanging round.' Mr. Hicks takes a fancy to May Jenks, the wife of a confirmed drunkard, but she fails to reciprocate. She even goes so far as to urge her renegade mate to chase Hicks out of town. The gambler also backs this up for purposes of his own and not particularly honorable. As a consequence, Mr. Hicks is told to quit at 5 p.m. or take what is coming to him from the outraged, although alcoholic husband. The wife, who has called Hicks a coward, now fears for her husband's life and seeks out Hicks to plead with him. He decides to prove that he is no moral coward. He braves the sneers and jeers of the crowd by quitting at the appointed time, though he slaps the gambler in the face with his gloves as a parting blow. Virtue triumphs in the person of May Jenks and her triumphant mate invites the crowd to celebrate."¹⁴

Hart was often fitted with story material in which, like Broncho Billy, he was a bandit who reforms (the "Good Bad Man"), but under infinitely more plausible circumstances than Anderson's. His character names suggested cool nerve or adventurous background: Yukon Ed, Dakota Dan, Silent Texas Smith. France spliced two such names to obtain Rio Jim which was then applied directly to the actor himself. Several times he died in character, performing an act of self-effacing generosity, but far more often he was alive at the end to reform and win the girl. The 1914-1915 series of two-reelers became classic, re-issued at intervals, sometimes under altered titles.

Hart was not a man to speak glibly. His words in an interview given out in midsummer 1915 provide evidence that he was happy at Inceville; there is no foreshadowing of the monumental disagreement which later estranged him and Ince, and which caused Hart to infer ridiculously in print that Ince had been no factor in his success in films: "It is mighty agreeable to work here [at Inceville] because Tom Ince is not only my boss but my friend. We roughed it together and together underwent the privations of actors struggling for recognition and experience."¹⁵



AS THE WOUNDED BANDIT Jim Stokes in *The Bargain*, Hart is hauled to shelter by Nell Brent (Clara Williams) and her father (J. Barney Sherry).

Like Tom Mix, William S. Hart also yearned to star in nothing but feature-length Westerns. His first was the five-reel *The Bargain* (1914), an expansion of a one-reeler called *Getting His Man* which Ince had directed in 1911. For this Hart and the company spent six weeks at the Grand Canyon obtaining scenes, then filmed match-up shots in California.

The Bargain was another of the earliest Westerns composed for the screen. One particular review of it proves that Broncho Billy had company in assuming that feature-length Westerns were unsuitable. The review states: *The Bargain* is "a bold . . . a reckless attempt to revive a style of motion picture we had hoped was a thing of the past . . . [it] is nothing more than an old-fashioned 'Western' . . .

"It is said that pictures of this sort are still popular in certain sections of the country and that nickelodeons in many big cities still yearn for them."¹⁶

This was just before Hart undertook a long program of five-reel films, with mounting success, followed soon afterward by Tom Mix. And the posse's still ridin' like mad.

References

1. *Motion Picture Magazine*, June, 1914, p. 101.
2. *The Moving Picture World*, March 28, 1914, p. 1666.
3. *Ibid.*, Sept. 20, 1913, p. 1286.
4. *The New York Dramatic Mirror*, June 16, 1915, p. 34.
5. *Ibid.*, March 3, 1915, p. 32.
6. *Motion Picture Magazine*, February, 1915, p. 124.
7. *The New York Dramatic Mirror*, Sept. 9, 1916, p. 18.
8. *Photoplay*, June, 1917, p. 154.
9. Preface to "Pinto Ben and other stories" by William S. Hart and Mary Hart (Britton Publishing Company, New York, 1919), p. 9.
10. *The New York Daily Tribune*, Nov. 30, 1899, p. 7.
11. *The Moving Picture World*, Dec. 28, 1912, p. 1277.
12. *Ibid.*, July 10, 1915, p. 225.
13. *Motion Picture Magazine*, September, 1922, p. 96.
14. *The Moving Picture World*, Dec. 19, 1914, p. 1695.
15. *Ibid.*, Dec. 5, 1914, p. 1390.

THE FIRST ANASTIGMAT LENS

by Rudolf Kingslake

FOLLOWING THE INVENTION of the Aplanat (or Rapid Rectilinear) lens in 1866, the development of photographic objectives passed through a long period of great inactivity until almost 1890. The many variations of the Aplanat, together with the simple landscape lens and the ubiquitous Petzval Portrait lens, adequately served the needs of the photographers of that period. To be sure, there were periodical complaints of the astigmatism which invariably served to limit the useful angular field covered by any particular lens, but nobody seemed to be able to do anything about it.

The optical problem can be expressed in a very simple way. A thin lens system with stop in contact with the lens has naturally a strongly inward-curving field, and if this field is forcibly flattened by introducing an external diaphragm, or by lengthening the lens and making appropriate changes in its internal structure, the penalty is a residue of overcorrected astigmatism which increases progressively outwards from the center of the field, and ultimately sets a limit to the performance of the lens. It has been known since 1840 that the amount of this residual astigmatism will be determined by the magnitude of the "Petzval Sum" of the lens, which is the sum of the ratio (lens power/refractive index) for all the elements in the system. This all-important sum can be reduced in three ways, one or more of which are necessarily embodied in every anastigmat lens. They are: (a) to use very thick meniscus-shaped elements with almost equal outside radii; (b) to use separated strong positive and negative elements of almost equal power; and (c) to use a crown glass of high refractive index and a flint glass of low refractive index.

The first method had been adopted by Emil Busch in his "Pantoskop" lens of 1865 (see *Image*, March, 1956, page 58). The second method could have been employed at any time, but designers were apparently afraid of the high lens powers involved and never made use of it. The third method awaited the availability of a crown glass of high refractive index, and it was the one which appealed most to Ernst Abbe, the young (26) college professor who was hired by

Carl Zeiss in 1866 to introduce a proper scientific and mathematical background to the manufacture of optical instruments by his company.

Having decided that an entirely new type of optical glass was required, Abbe in 1881 secured the services of Otto Schott, a skilled glass chemist from Witten, with whom he collaborated in establishing a new glass works in Jena. Here a veritable miracle of glass-making was accomplished. By 1886, only five years after the beginning of their collaboration, Abbe and Schott were able to publish a catalog containing no less than 44 different glasses, of which 19 were essentially new types. Three of these were barium crowns having just the desired properties for the design of anastigmat lenses. In subsequent catalogs issued in 1888 and 1890, a number of additional barium glasses were introduced and offered for sale.

Several designers, notably H. L. Hugo Schroeder, Moritz Mittenzwei, and Adolph Miethe immediately began to include the new glasses in their lenses, but the most successful was Paul Rudolph, who, working with Abbe, patented* in 1890 an entirely new type of lens. He called this the "Anastigmat" by virtue of the fact that with this new design it was possible to correct the astigmatism of a lens, at least for one obliquity angle. A few years later (1900), after other manufacturers had applied the name "anastigmat" to their products, Zeiss changed the name of his lens to "Protar."

Optically, the front component of the Protar lens resembled the front half of a Rapid Rectilinear, and the rear consisted of a modified Chevalier landscape lens in which the concave element was made of a low-index flint glass while the convex element was made of dense barium crown glass of high refractive index. Each half of the system was achromatized, and therein lay the distinction between the successful "Anastigmat" and the unsuccessful "Anti-planets." In the latter designs, Adolf Steinheil realized that the refractive indices of the positive and negative elements of each component should differ from each other in opposite senses, but he was unable to achieve this and at the same time

*DRP 56109, USP 444,714; BP 6028/90

Some Examples of the Zeiss "Anastigmat" (Protar) Lens.

achromatize each component separately. The powers of the components of the Protar were chosen to reduce distortion, and the cemented interface in the front component was adjusted to correct the spherical aberration while the cemented surface in the rear component had the effect of eliminating astigmatism at a point near the outer limit of the field of view.

During 1890-93 Carl Zeiss issued several series of Anastigmats as follows:

Series	Aperture	See Fig.
I	f/4.5	
II	6.3	
IIa	8.0	1
III	7.2	
IIIa	9.0	
IV	12.5	2
V	18.0	3

Series I, II, III, and IV were soon discontinued, series IIa lasted until after 1902, while series IIIa and V have been extensively used until the present time by commercial photographers as wide-angle lenses. An old (1901) camera catalog in the possession of George Eastman House lists series II, IIa, III, IIIa, IV, and V under the name "Anastigmat," although the name "Protar" had been officially adopted by Zeiss during the previous year.

The George Eastman House Collection also contains two actual lenses marked "C. Zeiss Anastigmat," one being a Series IIIa (f/9) lens of 172 mm focal length, and the other a series V (f/18) wide-angle lens of 632 mm focal length.

By 1901, Zeiss claimed to have sold over 100,000 anastigmat lenses. At that time five firms in other countries were licensed to manufacture and sell Protar lenses, namely, Bausch & Lomb in U.S.A., Ross in England, Krauss in France, Fritsch (formerly Prokesch) in Austria, and Koristka in Italy. Many other opticians have, of course, designed lenses of the same general type, but this form has now practically vanished in favor of other types which are capable of better aberration correction. Although the Protar is no longer with us, it sired the famous Dagor and Tessar designs, which are still active and important today.

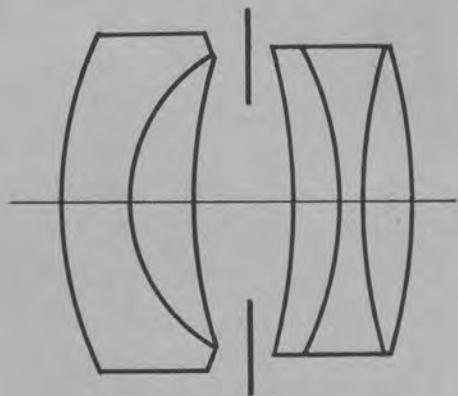


FIG. 1. Series III (f/7.2)

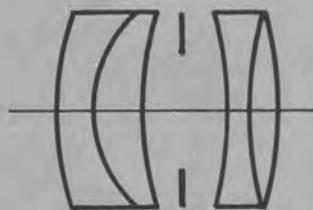


FIG. 2. Series IV (f/12.5)

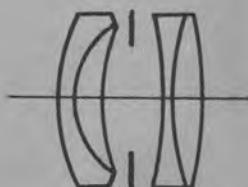


FIG. 3 Series V (f/18)

In March, 1890, George Eastman went abroad with his friend Fred Church. The purpose of the voyage was to get work started on the construction of a factory in England; he interviewed architects and machinery experts in London, signed a contract with the builders, and then went to the Continent for a short trip.

His first stop was Paris, and there he met Nadar, one of the most celebrated French photographers, skilled balloonist, and the first to take (just 100 years ago) an aerial photograph. Nadar, whose real name was Gaspard Félix Tournachon, had conducted a portrait studio in Paris ever since 1855, the year after Eastman was born. And now, with his son Paul, he was also in the photographic business. He had designed a hand camera, "L'Express Déetective Nadar," which accepted either dry plates or roll film, and a view camera. These he sold at his Office Générale de Photographie along with sensitized goods and other photographic material. Thus Nadar was Eastman's competitor. He was soon to become his French agent.

"On Friday night," Eastman wrote his mother on March 30, "we dined with Nadar. We had also breakfast with him and he had taken my picture. He says he was not satisfied with the other picture. The dinner was an elaborate affair served in his studio on the ground floor."

Eastman was 36 when he sat for Nadar and the portrait, in its direct simplicity, is typical of the work which made Nadar famous. Behind the skillful posing, to bring out the character of Eastman as the successful young business executive, lay the skill of a professional. It might have been taken anywhere in the world, but only by someone with the taste and experience which Nadar enjoyed.

Eastman carried along a No. 2 model Kodak camera on this trip. It took pictures 3½ inches in diameter, and Eastman used it for exactly the same purpose as his thousands of customers: to record his travels and the people he met. "The universal photographic notebook," he had named his invention, and he probably did not look upon his snapshot of Nadar as anything more than a record. Yet looking at it, we are at once transported to a specific place and time. We are in Paris, for there is the Opera in the background. We are in an age when gentlemen wore top hats in the daytime. It could only have been taken in Paris, yet—thanks to Eastman's ingenuity in simplifying the mechanics of photography—it could have been made by almost anyone.

These photographs of and by two great personalities of the history of photography sum up two entirely different approaches to the camera—the traditional posed formal portrait and the snapshot.

EASTMAN MEETS NADAR



INDEX TO MOTION PICTURE COLLECTION

OLD HEIDELBERG

1915. Produced in USA by Triangle (Fine Arts Griffith). Directed by John Emerson. Supervised by D. W. Griffith. With Dorothy Gish, Wallace Reid, Erich von Stroheim, Karl Formes, Raymond Wells, Mrs. Madge Hunt, Erik von Ritzau, Kate Toncray, Harold Goodwin, Francis Carpenter. 5 reels 35mm positive.



Historians may ponder the actual extent of Griffith's active supervision of the Triangle productions associated with his name but in 1915, the Triangle Film Corporation lost no opportunity to indicate that they were Griffith productions. In their releases the film is called "David W. Griffith's 'Old Heidelberg'" and describing the story in "The Triangle," the company's weekly for exhibitors (a forerunner of the still persistent press-book) it is promised that "a veteran of a former war describes a famous victory in the previous conflict, which gives Griffith a chance to stage several thrilling battle scenes."

These battle scenes, like the entire film, are considerably less than thrilling. Today *Old Heidelberg* retains a kind of Madame Tussaud point of interest in that one may see how Wally Reid looked before overwork and narcotics made him an early sacrifice.



to Hollywood greed and one may study here the acting of Von Stroheim in his first major role in films as Prince Karl Heinz's unbending valet.

THE BEGGAR OF CAWNPORE

1916. Produced in USA by Triangle (Ince-KB). Directed by Charles Swickard. With H. B. Warner, Lola May, Wyndham Standing, Wedgwood Nowell. 4 reels 28mm positive (edited version).

C. Gardner Sullivan's hectic melodrama set the personal struggle of a British medical officer to overcome narcotic addiction in the midst of no less than the Sepoy Mutiny. Through it all, the restrained intensity of H. B. Warner's acting is oddly out of place. *The Beggar of Cawnpore* is a relic of the period before the "Code" was formulated to forbid any screen treatment whatsoever of the problem of demoralization by drugs—a subject to which the motion picture world was hyper-sensitive. The ban persisted until 1955 when in defiance of the Code, United Artists in producing *The Man With the Golden Arm*, returned to the arena of freedom that had prevailed four decades ago.



HOODOO ANN

1916. Produced in USA by Triangle (Fine Arts Griffith). Directed by Lloyd Ingraham. Supervised by D. W. Griffith. With Mae Marsh, Robert Harron, Mildred Harris, William Brown, Pearl Elmore, Anna Hernandes, Charles Lee, Elmo Lincoln. 5 reels 16mm positive.

Hoodoo Ann is distinguished by one of Mae Marsh's most charming performances. In a Pickford-like story, she ranges from a mistreated orphanage slavery to a winsome teen-ager, dressing herself directly out of the pages of "Vogue." When the boy-friend, Robert Harron, takes her to the neighborhood movie, we are treated to one of the most delicious sa-

tires of early movies; here we find Triangle lampooning one of its own most valuable properties: the William S. Hart Western. The technical presentation of the movie within a movie is splendid. We see the outlines of the screen, the pianist at work and cut frequently to the engrossed faces of Mae and Bobbie as they watch Carl Stockdale stalk through a hilarious imitation of Bill Hart. If the ability to understand its own weaknesses and laugh at its own faults is an indication of the cinema's maturity, then *Hoodoo Ann* marks 1916 as the year the American film grew up even more so than did *Intolerance*.



RAFFLES

1917. Produced in USA by L. Lawrence Weber Photodrama Corporation. Directed by George Irving. With John Barrymore, Kathryn Adams, Frank Morgan, Christine Mayo, Evelyn Brent, Nita Allen, Mathilde Brundage, Frederick Perry, H. Cooper Cliffe, Mike Donlin. 5 reels 16mm positive.

John Barrymore's great gifts as a romantic comedian are so engagingly evident in the pre-Hollywood-Barrymore piece that the continued absence of his other New York comedies from study screens is most deplorable. Exteriors were filmed outside the Players' Club and other recognizable Manhattan landmarks. Although the action is presumably set in London, the film breathes a summery 1917



New York and Long Island atmosphere that brings a nostalgic charm to the film quite apart from its gay pace and unpretentious excellence.

THE NARROW TRAIL

1917. Produced in USA by William S. Hart (Paramount Artcraft). Directed by William S. Hart. With William S. Hart, Sylvia Breamer, Milton Ross, Robert Kortman, Robert McKim. 5 reels 35mm positive.



One of the favorite Hart themes was just the reverse of the early Fairbanks situations: instead of the city slicker going to the West, Hart liked to send his Western bad-man character into the cities to prove that the city toughs were no match for the man of the outdoors. In *The Narrow Trail*, he sends his errant knight delightfully, to San Francisco. On the hunt for the wicked woman who has deceived him on his own territory, Hart hunts her up and down the hills overlooking the Golden Gate, stalks her through Fisherman's Wharf, confronts her in a saloon where he and Robert Kortman stage a rousing battle that far outdoes the undeservedly famous brawl of the first *Spoilers*.



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